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ABSTRACT

This report of teacher supply and demand in Florida looks at measures of teacher shortages during the 1984-85 school year, compares the projected supply of teachers by subject field with the numbers needed during 1986-87, and then projects the demand for teachers through the end of the century. As seen in prior years, some fields showed a much higher percentage of positions not filled by certified personnel than others. Mathematics, science, foreign languages, and education for the emotionally handicapped had even higher percentages of teachers hired out-of-field during fall 1984 than the prior year. The long-range picture continues to indicate the likelihood that an impending serious teacher shortage will be one of the most important educational issues Florida will face over the next 15 years. The report estimates that during 1987-88 the state will need more than 8,000 additional teachers if out-of-field teachers are not included in the calculation, and about 12,000 teachers if they are. The most important factor in teacher supply and demand in Florida during the years beyond 1986 is the shift in the age distribution of the population. (JD)

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Teacher Supply and Demand In Florida

Fourth Annual Report

October 1985

ED277669

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EXECUTIVE SUMMARY

This report of teacher supply and demand in Florida looks at measures of teacher shortages during the 1984-85 school year, compares the projected supply of teachers by subject field with the numbers needed during 1986-87, and then projects the demand for teachers through the end of the century.

Current Teacher Supply and Demand

Three data sources are available which help to gauge the demand for new teachers: the fall vacancy survey by subject field, teacher terminations, and the number of teachers currently teaching out of field.

Teacher vacancies at the beginning of the 1984-85 school year represented 9.1 percent of the total number of teachers in Florida classrooms, or a 26 percent increase in the number of vacancies from fall 1983. This increase was due not only to larger enrollments at the kindergarten and first grade level, but to additional teachers hired to staff the longer school day. For the most part the number of applicants expanded to fill the additional number of vacancies so that by October 1 some 18 percent of these vacancies had been filled by teachers certified in the appropriate fields, while 8.5 percent had been filled by teachers not in the appropriate fields, and 6 percent remained unfilled or were filled by temporary substitutes. Twenty percent of these newly hired teachers had taught in another Florida school district the prior year.

As seen in prior years, some fields showed a much higher percentage of positions not filled by certified personnel than others. Indeed, mathematics, science, foreign languages, and education for the emotionally handicapped (all designated as critical teaching fields by the State Board of Education for each of the last three years) had even higher percentages of teachers hired out of field during fall 1984 than the prior year.

Vacancy information by district is included in this year's report. Districts range widely in the percentage of positions vacant and in the percentage of teachers hired out of field. Six districts had more than a fifth of their teaching positions vacant in fall 1984 and eight districts faced severe enough teacher shortages that by October 1 at least one fourth of their vacant positions were still unfilled, or had been filled by a teacher not certified in the appropriate field.

During 1983-84, the most recent data year, 1.5 percent of Florida's teachers retired. In actual numbers this

represents a decrease from the year before from 1,334 to 1,294. During the same year 4,156 teachers resigned for other personal reasons, an increase over the 3,589 such resignations the prior year. This increase may be related to transfers to other school districts stemming from the sharp increase in the number of vacant positions in fall 1984.

Information from the Department's Course Data File for fall 1984 indicates that 4.5 percent of the full-time-equivalent teachers in the state were teaching out of field. This compares with a reported 4.1 percent the prior fall. Since district-level figures on out-of-field teachers are still being verified, these percentages must be regarded as tentative.

Teacher supply in this report is measured by the number of graduates of Florida teacher education programs, the number of candidates passing the teacher certification examination and the number of new teachers certified. As in prior years, the most conclusive statement that can be made about teacher supply in Florida is that a large proportion of new teachers come from out of state. Over half of the teacher candidates taking the teacher certification examination are from out of state, and about 64 percent of the new certificates are issued to applicants from out of state.

Information taken from a survey of teacher education programs during all 1984 showed that 7 percent (232) more students graduated from teacher education programs during 1983-84 than were projected. However, there were fewer graduates than projected in the critical teacher areas of mathematics, science, emotionally handicapped, English, and foreign languages. The survey projects a decrease in the total number of graduates for 1984-85 and increases for 1985-86 and 1986-87. Proportionally greater increases are projected for the fields with critical shortages, but such increases have frequently not been realized when projected in the past.

Future Supply and Demand

Looking ahead to 1986-87, the report makes projections of both the number of teachers needed and teacher supply. Demand takes into account teacher terminations, the number of teachers now teaching out of field, and the additional classes anticipated because of enrollment increases in grades K-3 and the implementation of new state high school graduation requirements.

The report estimates that during 1986-87 the state will need more than 8,000 additional teachers if out-of-field teachers are not included in the calculation, and about 12,000 teachers if they are. Teacher education programs expect about 3,500 graduates, with proportionally higher percentages

of these graduates in noncritical fields than the proportion of vacancies in these same fields.

As cited in prior reports, the most important factor in teacher supply and demand in Florida during the years beyond 1986 is the shift in the age distribution of the population. State forecasts indicate that during the next few years the state can expect overall enrollment increases of from 30,000 to 50,000 a year, representing a 2 to 3 percent annual increase. From 1985 to 1990 the number of 22 to 29 year olds will remain about the same, but the 22 to 24 year olds in the group will decrease by about 11 percent. Beyond 1990 the size of the potential teacher pool will continue to decline, while enrollments in grades 7-12, the grades already experiencing shortages in specific subject fields, will swell. Conservative projections show grades 7-12 growing by 20 percent from 1990 to 1995 and by 17.5 percent from 1995 to 2000, while the number of 22 to 29 year olds will decline by 6 percent and 4.5 percent during these same two five-year periods.

Thus the long-range picture continues to indicate the likelihood that an impending serious teacher shortage will be one of the most important education issues which Floridians will face over the next fifteen years.

INTRODUCTION

This is the Department of Education's fourth annual report of teacher supply and demand in Florida. During these last four years, reports from national commissions and organizations, news releases from teachers' unions, numerous news articles and television specials, and regional statistical reports have gone a long way toward creating public awareness of teacher shortages.

Such awareness can be helpful in influencing future trends if it reflects an accurate understanding of those trends, including a sense of timing. For instance, awareness is helpful if it results in a larger percentage of competent young adults being challenged to go into teaching. Awareness is not helpful if it leads to apathy, or if forecasts of future general shortages get translated into incorrect assumptions about the present. Warning the state about an impending crisis can cause the public to respond with, "So what else is new?" when the actual crisis gets closer.

What can be said about teacher shortages in Florida at present? Several things. For one thing, the state does not yet face a general teacher shortage, thanks to the fact that 60 to 65 percent of the new teachers come from outside the state. Second, Florida does have a shortage, but not in all teaching fields and not in all geographic areas. As has been pointed out in prior reports, shortages are greatest in mathematics, science, and exceptional education fields, and in geographic areas which are the fastest growing.

Most importantly, the state does face the prospect of a more general shortage in the 1990's, when the children born to parents of the post-World War II baby boom reach high school at the same time that there are smaller numbers of young adults. This has been the consistent message of the three prior supply and demand reports. The projected demographic trends have not changed, nor has there been significant change in the number of graduates in teacher education. The impending crisis has not gone away.

So what is new in this year's report? For one thing, 1984-85 saw the beginning of projected sharp grade-level increases. Enrollments in kindergarten jumped by 14 percent over the year before. Although additional increases in kindergarten enrollments are projected over the next few years, the 14-percent increase in 1984-85 marks both the beginning of the anticipated age-group bulge and the highest point of the bulge in terms of the size of increases. From the standpoint of the size of actual enrollments, however, kindergartens are not expected to peak until about 1992-93.

Increases seen in this one grade level are now beginning to move through the system. By the year 2000 enrollments in grade 5 are expected to peak, with the peak year for the rest of the grades occurring in the first decade of the next century. There is no year between now and the end of the century in which fall enrollments will be smaller than they were the year before.

A further trend noted in assembling the data for this year's report was that the number of fall vacancies increased by 26 percent over the year before, significantly higher than the concurrent 1.8 percent overall increases in full-time-equivalent enrollments. Much of this increase in teacher vacancies seemed to be due to the additional teachers hired to staff the extended school day. For the most part, the teacher pool seemed to expand to meet this increased need for new teachers. As a result, the percentage of teachers hired to teach in areas for which they were not certified increased only from 7.8 percent in 1983-84 to 9.0 percent in 1984-85, small compared to the size of the increase in vacancies.

Unfortunately, the increases in out-of-field teachers hired for the most part came in areas where the state is already experiencing shortages. All of the fields declared critical teaching areas in 1984 and 1985--except English--saw an increase in the percentage of teachers hired who were not certified in the appropriate fields.

The report that follows summarizes data relating to teacher supply and demand in Florida from a wide range of sources. Each of these sources is complex and each has its limitations. The report, therefore, includes more detail than might be preferred. Although such an approach does not make for easy reading, the detail is necessary both for accuracy and for clarity.

CURRENT DEMAND FOR TEACHERS

Demand: Teacher Vacancies, Fall 1984

This section of the report is based on results of a survey taken during fall 1984 of teacher vacancies in the 67 Florida school districts, the third year such a survey has been taken. The vacancies covered by the survey occurred from July 1 to October 1, 1984.

Although vacancies resulting from resignations during the rest of the school year are not included in this report, the survey presents a fairly complete picture of vacancies for the entire year. In the past, the number of fall vacancies has totalled about 90 percent of the teacher terminations during the prior year. The number of vacancies in fall 1984 (7,884) was actually higher than the number of classroom teachers terminating during 1983-84 (5,636, not including staff reduction; 6,140, including staff reduction). Whenever the number of fall vacancies is higher than teacher terminations for the entire year before, this indicates a sizeable increase in the number of teachers needed in the state. Results from the vacancy survey show this to be true for the year 1984-85.

Number of Fall 1984 Vacancies Compared to the Two Prior Years

During fall 1984 Florida school districts reported a total of 7,844 vacancies, an increase of 26.2 percent from fall 1983 after an increase of only 6.5 percent the year before. As Table 1 shows, increases were higher in basic and vocational programs than in exceptional education programs.

Table 1
Number of Teacher Vacancies
Florida School Districts
By Program Area*

Program Area	Vacancies Fall 1982	Vacancies Fall 1983	Percentage Change	Vacancies Fall 1984	Percentage Change
Tot. Basic	4,163	4,642	11.5	5,972	28.6
Tot. Excep.	1,241	1,185	-4.5	1,375	16.0
Tot. Voc.	462	421	-8.9	537	27.6
Total	5,866	6,248	6.5	7,884	26.2

*Taken from Appendix Table A5.

These increases cannot be fully explained by corresponding enrollment increases. Full-time-equivalent (FTE) enrollments in basic K-12 programs increased by about 1.8 percent in 1984-85, exceptional enrollments by 7.2 percent, and vocational enrollments by 7.5 percent, resulting in an overall increase of 2.0 percent, up from a 0.3 increase the year before. This 2.0 percent increase in enrollments is much smaller than the 26.2 percent increase in the number of teacher vacancies.

District personnel directors contacted about the upturn in the number of vacancies during fall 1984 cited two main reasons for the increase. The first was enrollment growth, especially in kindergarten and first grade. A second and more important reason given, however, was the staffing of the longer school day. Prior to 1984-85 most school districts scheduled five or six periods of instruction a day for high school students. Legislation passed in 1984 to strengthen graduation requirements included special funding for school districts to adopt a longer school day. Most of the districts implemented a seven-period school day in 1984-85. This change necessitated either paying existing teachers a bonus to teach more periods, or hiring new teachers to staff the extended day. Many districts chose to do the latter.

These two factors cited by districts as influencing the number of teacher vacancies are reflected in Table 2, a comparison of vacancies over the last three years in selected subject fields. The effect of increased enrollments in kindergarten and first grade can be seen in the much larger number of vacancies in elementary education in 1984 than in the two prior years. The effect of the longer school day can be seen in an increased number of vacancies in other fields shown in Table 2.

Table 2
Percentage Change in Number of Teacher Vacancies
Fall 1982 - Fall 1984
Selected Subject Fields*

Subject Fields	Vacancies Fall 1982	Vacancies Fall 1983	Percentage Change	Vacancies Fall 1984	Percentage Change
Elem. Educ.	1,695	1,742	2.8	2,032	16.6
English	592	739	24.8	847	14.5
Math	401	437	9.0	589	34.8
Science	345	497	44.1	769	54.7
For. Lang.	85	107	25.9	248	131.8
Kent. Handi.	233	202	-13.3	239	18.3
Speech Ther.	185	163	-11.9	197	20.9
Emot. Handi.	264	261	-1.1	307	17.6
Bus.	102	98	-3.9	135	37.8
Home Econ.	62	65	4.8	135	107.7

*Taken from Appendix Table A5.

The extended school day seemed to affect all basic fields significantly. Although only selected basic fields are included in Table 2, the complete table (Appendix Table 5A) shows that vacancies in many basic fields increased by more than 40 percent. Foreign languages experienced the largest increases in vacancies, up 132 percent over the prior year, as districts sought to strengthen both their foreign language offerings and enrollments.

It might be noted that the increase for English was not as great in 1984 as in 1983. Fall 1983 saw a number of additional English teachers hired in order to staff smaller-sized writing classes. Having already increased the number of English teachers hired in 1983, the districts did not face as sharp an increase in 1984.

The survey shows that enrollments in exceptional education programs continue to increase, although at a smaller rate than the basic programs. Three large exceptional programs, all of which had significant increases after experiencing decreases the year before, are included in Table 2. Also included are two vocational education programs with significant increases. Personnel directors reported that the increase in the number of vacancies in home economics resulted chiefly from the life-management course requirements which students must now meet for graduation.

The shift in the number of vacancies among program areas can be seen in Table 3. As shown, basic programs represent an increasing percentage of vacancies. Vacancies in exceptional education programs are decreasing when compared to other program areas, while there is little change in vocational programs.

Table 3
Number of Teacher Vacancies
Florida School Districts
By Program Area*

Program Area	Vacancies			Vacancies in Each Field as a Percentage of All Vacancies		
	Fall 1982	Fall 1983	Fall 1984	Fall 1982	Fall 1983	Fall 1984
Tot. Basic	4,163	4,642	5,972	71.0	74.3	75.7
Tot. Excep.	1,241	1,185	1,375	21.2	19.0	17.4
Tot. Voc.	462	421	537	7.9	6.7	6.8
Total	5,866	6,248	7,884	100.0	100.0	100.0

*Taken from Appendix Table A6.

Similar information for selected subject fields is shown in Tables 4 and 5. Fields representing a smaller percentage of the total number of vacancies (Table 4) include the basic fields of elementary education and music, four of the larger

exceptional education programs, and the vocational program trades/industrial. Among fields which represent a larger percentage of total number of vacancies (Table 5) are mathematics, science, social studies, foreign languages, and home economics.

Table 4
Fields Which Show a Decreasing Percentage
In the Total Number of Vacancies*

Subject Fields	Number as a Percentage of All Fields		
	Fall 1982	Fall 1983	Fall 1984
Elem. Educ.	28.9	27.9	25.8
English	10.1	11.8	10.7
Music	4.0	3.6	3.0
Ment. Handi.	4.0	3.2	3.0
Speech Ther.	3.2	2.6	2.5
SLD**	4.9	4.6	3.8
Emot. Handi.	4.5	4.2	3.9
Trades/Ind.	3.1	2.5	2.1

*Taken from Appendix Table A6.
**Specific Learning Disabled (SLD).

Table 5
Fields Which Show a Increasing Percentage
If the Total Number of Vacancies*

Subject Fields	Number as a Percentage of All Fields		
	Fall 1982	Fall 1983	Fall 1984
Math	6.8	7.0	7.5
Science	5.9	8.0	9.8
Soc. Stud.	3.6	4.8	6.2
For. Lang.	1.5	1.7	3.2
Home Econ.	1.1	1.0	1.7

*Taken from Appendix Table A6.

Subject Fields Which Were Difficult to Fill in Fall 1984

One indication of teacher shortages is the percentage of teachers hired who are not certified in the appropriate fields. Those subject fields where 9 percent or more of the new teachers hired did not have the proper certification for fall 1984 are given in Table 6. They include mathematics, science, foreign languages, and a number of exceptional fields, which historically have been more difficult to fill than fields within basic programs. All of the fields included in this table were cited the prior year for having over 9 percent of the teachers hired out of field. Of these, mathematics, science, foreign languages, and exceptional programs for the mentally handicapped, emotionally handicapped, and gifted all have even higher percentages of teachers hired out of field than the prior year.

Table 6
Subject Fields With More Than Nine Percent of New Hires
Not Certified in the Appropriate Field*
Fall 1984

Subject Fields	Total Number of New Hires	Percentage Certified In The Appropriate Field	Percentage Not Certified In The Appropriate Field
Math	570	86.8	13.2
Science	725	82.9	17.1
For. Lang.	232	89.8	10.2
Ment. Handi.	215	84.7	15.3
Phy. Imp.	14	85.7	14.3
SLD	271	85.3	14.7
Emot. Handi.	276	74.4	25.6
Gifted	87	49.4	50.6
Dist.	22	81.8	18.2

*Taken from Appendix Table A3.

Table 7 combines the percentages of teacher hired out of field with the percentage of positions which were unfilled. Included are those fields which had (1) forty or more positions unfilled or filled out of field and (2) fifteen percent or more of the positions in that field unfilled or filled out of field. Those falling into both these categories are mathematics, science, foreign languages, mentally handicapped, speech therapy, specific learning disability, emotionally handicapped, and gifted.

Table 7
Subject Fields Which Were
The Most Difficult to Fill*
Fall 1984

Subject Fields	Estimated Number of Vacancies	Vacancies Unfilled or Filled Out of Field	Percentage of Vacancies		
			Filled Out of Field	Unfilled	Unfilled or Filled Out of Field
Math	589	94	12.8	3.2	16.0
Science	769	168	16.2	5.7	21.9
For. Lang.	248	40	9.5	6.5	16.0
Ment. Handi.	239	57	13.8	10.0	23.8
Speech Ther.	197	41	5.1	15.7	20.9
SLD	296	64	13.5	8.3	21.7
Emot. Handi.	307	102	23.0	10.1	33.1
Gifted	101	58	43.6	13.9	57.4

*Taken from Appendix Table A4. Defined as fields having (1) 40 or more positions unfilled or filled out of field and (2) fifteen percent or more positions unfilled or filled out of field.

One important field which was on this list last year but not the current year is English. As already discussed, while there were more vacancies in English this year than last, the percentage increase in the number of vacancies was lower. The percentage of positions unfilled or filled by out-of-field teachers was also slightly lower, though still

substantial--13.1 percent in fall 1984, compared to 15.4 percent in fall 1983. English, therefore, falls below the arbitrary cutoff for this table, which was set at 15 percent.

Percentage of Teachers New to the Florida School System

School districts are asked to indicate on the vacancy survey how many of their newly hired certified teachers taught last year in another Florida school district, or, in other words, were simply moving from one school district to another. When looking at teacher demand at the aggregate state level, these individuals are technically not "new hires" since they taught in the public education system in Florida the year before.

During fall 1983 one fourth of the teachers covered by the survey were reported as having taught the prior year in another Florida school district. As shown in Table A3, the proportion of new hires so categorized in fall 1984 fell to one fifth, with the proportion even smaller for the more critical subject fields. The actual number of teachers moving from one school district to another was about the same--1,363 compared to 1,372. However, since there was a significantly larger number of vacancies, a larger proportion of these vacancies had to be filled by new teachers--teachers new to education or at least new to public education in Florida.

Vacancies by School District

Appendix Table A7 summarizes the vacancy data for each of the 67 school districts for fall 1983 and fall 1984. This provides information not included in prior teacher supply and demand reports.

As can be seen, districts ranged widely in both the percentage of teacher positions vacant and the percentage of positions unfilled or filled out of field. Omitting Dade County (which includes all teachers in the Beginning Teacher Program and all those new hires whose applications for certification are still pending in its count of out-of-field new teachers), the percentage of positions unfilled or filled out of field for fall 1984 ranged from 65 percent in St. Lucie County to none in twelve other counties. The state average was 14.7 percent. Two districts other than St. Lucie--Brevard and Lee--had more than 40 percent unfilled/out of field, while five others had more than 25 percent. In other words, according to results of the vacancy survey for fall 1984, eight school districts in Florida faced severe enough teacher shortages that by October 1 at least one fourth of their vacant positions were still unfilled or had been filled by a teacher not certified in the appropriate field.

The districts also range widely in the number of vacancies as a percentage of all classroom teachers. This statistic, vacancies as a percentage of all classroom teachers, shown for each district in Table A7, provides a proxy for the proportion of positions vacant. For the state as a whole 7.5 percent of the positions were vacant during fall 1983, with 9.3 percent vacant during fall 1984. Again omitting Dade County, district figures for 1984 ranged from 5 percent in Brevard to 25 percent in Glades. Six districts had more than a fifth of their teaching positions vacant.

The final column in Table A7 gives the percentage change in the number of vacant positions from 1983 to 1984. Only eight districts in the state had fewer vacancies in 1984 than in 1983. Fourteen districts saw the number of vacancies more than double from one year to the next. Fourteen additional districts had increases from 50 percent to 100 percent.

A comment needs to be made about the vacancy figures for Dade County. Dade's decrease in vacancies from 988 to 277 seems contrary to the trend elsewhere in the state. District staff explained that in 1983 the county was expanding certain programs, such as those in music and art, while in 1984 a number of programs were cut back. Teacher termination data collected by the Department show that during 1983-84, terminations for Dade equalled 764--255 of which were due to staff reduction. This 255 figure is more than half of the state total of 504. It is clear that during fall 1984 Dade drastically decreased the number of new teachers hired in the district. Even so, with the 277 vacancies representing only 2.2 percent of all classroom teachers in the district, the proportion is far enough below the figures for the rest of the districts to raise questions. Because of its size and its resulting dependence upon computer-generated data, the district has always had difficulty compiling accurate data for the vacancy survey whenever the definitions in the survey have not matched the definitions of the data items stored. However, in this case district staff have assured the Department that the 277 vacancy total shown for fall 1984 is correct. This, therefore, is the number used for Dade throughout the report.

Demand: Teacher Terminations

As shown in Table 8, the number of teachers terminating employment during 1983-84 totalled 5,636, up from 5,200 the prior year.[1] This number includes 1,294 retirements, 4,156 resignations for other reasons, and 186 dismissals. The 5,636 total is 6.8 percent of the total number of teachers, up from last year's 6.3 percent.

[1]The number of resignations reported in last year's report was 5,549, making a total termination rate of 6.77 percent. Palm Beach, which changed its original number of terminations from 194 to 543, has changed its number again, back to the 194 the county reported originally.

Table 8
Classroom Teachers Terminating

	1982-83		1983-84	
	Number	As a Percentage of Total Teachers	Number	As a Percentage of Total Teachers
Retirements	1,334	1.62	1,294	1.56
Resignations	3,589	4.30	4,156	5.01
Dismissals	277	0.34	186	0.22
Total	5,200	6.34	5,636	6.80
Total Classroom Teachers	81,982		82,928	

Table 9
Number of Teachers Teaching Out of Field*

	Fall 1983 Number of FTE Teachers			Fall 1984 Number of FTE Teachers		
Program Area	1 Total	2 Teaching Out of Field	3 Percentage 2/1	4 Total	5 Teaching Out of Field	6 Percentage 5/4
Tot. Basic	62,041	2,289	3.7	65,289	2,697	4.1
Tot. Excep.	10,072	694	6.9	10,689	751	7.0
Tot. Voc.	5,642	183	3.3	5,980	242	4.0
Total	77,755	3,167	4.1	81,957	3,690	4.5

*Taken from Appendix Table A8.

Table 10
Number of Teachers Teaching Out of Field*
Selected Fields

	Fall 1983 Number of FTE Teachers			Fall 1984 Number of FTE Teachers		
Subject Fields	1 Total	2 Teaching Out of Field	3 Percentage 2/1	4 Total	5 Teaching Out of Field	6 Percentage 5/4
Elem. Educ.	28,114	185	0.7	28,811	286	1.0
English	7,369	513	7.0	7,701	569	7.4
Math	5,593	429	7.7	5,805	405	7.0
Science	4,374	389	8.9	4,809	466	9.7
Soc. Stud.	4,408	358	8.1	4,736	377	8.0
For. Lang.	1,348	65	4.8	1,666	114	6.8
Ment. Handi.	1,750	83	4.7	1,727	74	4.3
Emot. Handi.	1,154	168	14.5	1,345	210	15.6
Gifted	1,007	193	19.2	1,099	267	24.3

*Taken from Appendix Table A8.

Last year's report noted that the number of retiring teachers had increased significantly each of the two prior years. This increase did not continue into 1983-84, however. A total number of 1,334 teachers retired during 1982-83, compared to 1,294 retirements during 1983-84.

About three quarters of the teacher terminations each year are due to resignations covered under the category designated "for other personal reasons." As many as 35 to 50 percent of these resignations are made up of inter-district transfers. The rest of the resignations for personal reasons--from 37 to 47 percent of all terminations--represent teachers leaving the classroom short of retirement for such varied reasons as moving to another state, returning to school, staying at home with the family, or seeking employment outside education. During 1982-83, 3,589 resignations fell into this category, while in 1983-84 the number rose to 4,156. Since a third to a half of resignations are due to transfers to other school districts, it may be that the increase in resignations may be related partly to the sharp increase in the number of vacancies in fall 1984. As a point of reference it should be pointed out that, despite this increase, the number of resignations for other personal reasons for 1983-84 was still significantly lower than the number in this category for 1979-80 through 1981-82.

Estimating the number of teachers who terminate their positions, including both retirements and resignations for other reasons, is an important element in projecting teacher demand. In absence of any clear trend, the second half of this report uses the termination rate for the most recent year to project the number of terminations through the year 2000. No information is available on the number of teacher terminations by subject field. Therefore, in making the projections, the distribution by subject area was based on the subject field distribution of the vacancies for fall 1984. This procedure seems preferable to assuming the same termination rate for each subject area.

Demand: Teachers Teaching Out of Field

In fall 1983 the Department of Education began collecting information on the number of teachers in each course teaching out of field, that is, teaching courses for which they did not have the appropriate certification.[2] An analysis of the fall 1984 data by district has revealed that, for both 1983 and 1984, at the secondary level as many as half of the state's out-of-field teachers were in Dade County, although the county represents only 14 percent of the teaching force. By way of example, Tables 9 and 10 show the percentages of

[2]All out-of-field data shown are based on full-time-equivalent teachers. Thus, if teachers were teaching in more than one subject area, they were counted as out of field for only the proportion of time they actually spent teaching out of field.

teachers teaching out of field in representative subject fields for the state, for Dade, and for the state without Dade. It shows that during fall 1984 (Table 10) Dade had 19.0 percent of its full-time-equivalent English teachers, 17.6 of its mathematics teachers, 25.2 percent of its science teachers, and 20.5 percent of its health and physical education teachers teaching out of field, while for the state without Dade, 5.7 percent of the English teachers, 5.5 percent of the mathematics teachers, 8.0 of the science teachers, and 3.2 percent of the health/physical education teachers were teaching out of field. By contrast, Dade's percentage of elementary classroom teachers teaching out of field is close to that of the rest of the state.

The pattern for Dade's exceptional programs was similar to the basic programs, with small percentages of teachers reported teaching out of field at the elementary level and very large percentages at the secondary level. Since Dade was not the only district which had difficulty getting accurate out-of-field information for secondary exceptional programs, information on out-of-field exceptional teachers from the Annual Data Report of the Department of Education Bureau of Exceptional Students was used in place of Course Code data for this current teacher supply and demand report.

Dade staff are re-examining the procedures for generating the district's out-of-field data to determine whether the differences in percentages between the district and the state are due to an inconsistency in definitions or an error in the collection of the data, or if they represent a genuine difference between the proportion of out-of-field teachers in Dade and the rest of the state.

Until Dade completes an analysis of its procedures for collecting secondary out-of-field data, it is impossible to know which set of percentages--with or without Dade--is more accurate. However, since Dade seemed to have used the same data-collection procedures for both fall 1983 and fall 1984, it is possible to note any emerging trends, as well as to compare percentages of out-of-field teachers by subject field.

To this end, Tables 11 and 12 summarize the out-of-field data (including Dade) for fall 1983 and fall 1984. Table 11 gives the percentages by program areas. It shows, for instance, that the overall percentage of full-time-equivalent teachers teaching out of field increased slightly from 4.1 to 4.5 over the two-year period.

Table 12 gives the same information for nine representative fields. All four main basic secondary fields--English, mathematics, science, and social studies--have 7.0 percent or more of the teachers teaching out of field, with science having the highest percentage of out-of-field teachers for

these basic fields (9.7 percent in 1984). In contrast to these percentages for secondary subject fields, only 1.0 percent of the elementary classroom teachers were teaching out of field, while 15.6 percent of the teachers of emotionally handicapped and 24.3 percent of the teachers of the gifted were teaching out of field.

Table 11
Number of FTE Teachers Teaching Out of Field
Dade County Compared to the Rest of the State
Selected Fields
Fall 1983

	STATE			DADE			STATE WITHOUT DADE		
Subject Fields	1 Total	2 Teaching Out of Field	3 Percentage 2/1	4 Total	5 Teaching Out of Field	6 Percentage 5/4	7 Total	8 Teaching Out of Field	9 Percentage 5/4
Elem. Educ.	28,114	185	0.7	4,659	41	0.9	23,455	144	0.6
English	7,369	513	7.0	1,032	226	21.9	6,337	287	4.5
Math	5,593	429	7.7	772	123	15.9	4,821	306	6.3
Science	4,374	389	8.9	592	125	21.1	3,782	264	7.0
Soc. Stud.	4,408	358	8.1	623	153	24.6	3,785	204	5.4
For. Lang.	1,348	65	4.8	439	26	5.9	909	39	4.2
Health/PE	4,903	208	4.2	770	103	13.3	4,133	105	2.5

Table 12
Number of FTE Teachers Teaching Out of Field
Dade County Compared to the Rest of the State
Selected Fields
Fall 1984

	STATE			DADE			STATE WITHOUT DADE		
Subject Fields	1 Total	2 Teaching Out of Field	3 Percentage 2/1	4 Total	5 Teaching Out of Field	6 Percentage 5/4	7 Total	8 Teaching Out of Field	9 Percentage 5/4
Elem. Educ.	28,811	286	1.0	4,730	54	1.2	24,081	231	1.0
English	7,701	569	7.4	970	184	19.0	6,730	385	5.7
Math	5,805	405	7.0	704	124	17.6	5,100	282	5.5
Science	4,809	466	9.7	474	120	25.2	4,335	346	8.0
Soc. Stud.	4,736	377	8.0	574	132	22.9	4,162	245	5.9
For. Lang.	1,666	114	6.8	456	29	6.4	1,210	85	7.0
Health/PE	5,005	287	5.7	724	149	20.5	4,281	138	3.2

CURRENT SUPPLY OF TEACHERS

Supply: Candidates Passing the Teacher Certification Examination

To be certified to teach in Florida, each new applicant must pass a written examination containing sections in reading, writing, mathematics, and professional education. During the 1981-to-1983 period, from 79 to 86 percent of all test applicants passed all four sections of the examination. In

April 1983 the State Board of Education made the test more difficult by raising the cut-off score. Since then from 79 to 83 percent of the candidates have passed the examination.

As seen in Table 13, candidates taking and passing the teacher certification examination numbered 7,426 during 1983-84 and 8,081 during 1984-85.[3] For both years, approximately 55 candidates out of every 100 were graduates of out-of-state colleges and universities.

Table 13
Number of Candidates Passing
the Teacher Certification Examination

	1983-84		1984-85	
	Number	Percentage	Number	Percentage
Florida	3,348	45.1	3,746	46.4
Out-of-State	4,078	54.9	4,335	53.6
Total	7,426	100.0	8,081	100.0

One of the reasons more applicants are now taking the examination is that the rules governing who can apply to take it have changed. Earlier, teaching candidates could not take the examination unless they had completed the certification process. Applicants may now take the examination if they have a degree and can qualify for an initial temporary certificate, or if they are a student in an approved teacher education program expecting to graduate within six months. With this change of rule, colleges of education are encouraging students to take the examination prior to graduation. Officials in teacher education programs also report that liberal arts majors are now sometimes taking the examination to increase their employment options even though they have not decided if they will seek a teaching position.

Knowing the total number of candidates passing the teacher certification examination is of limited value in evaluating the supply of teachers without also knowing the certification areas these candidates represent. Unfortunately, this information is not available.

Supply: Newly Certified Teachers

Extensive information is collected on the certification of teachers in Florida. However, no procedure has been developed for keeping track of current employment status of teachers once they are certified. Thus we do not know how many are currently teaching in Florida, how many have left Florida or the field of education, how many are available for teaching, or even how many are deceased. Since no way has

[3]The number passing the certification examination indicated earlier is higher than given above, because of a recording error made in preparing last year's report.

been found to keep addresses current, attempts to survey holders of certificates have been unsuccessful because of low response rates.

While the Active Certificate File cannot be used to estimate the size of the potential teacher pool, data can be retrieved giving the number of certificates issued during each year to persons who have never before been certified to teach in Florida. Information available in the file makes it possible to categorize the newly certified teachers by certification field and to compare this information to data from other sources.

Table 14 compares the number of certificates issued during 1984-85 in elementary education and the five critical teacher fields with the number of new teachers hired in these fields during fall 1984.[4] The information in this table is useful even though there is not a one-to-one relationship between certificates issued and new teachers hired. Some teacher candidates apply for certificates before they apply for positions. Therefore, the number of certificates issued includes individuals who applied for certificates but were subsequently not hired. On the other hand, the number of new certificates issued does not include teachers formerly certified who are returning to teaching and reapplying for certification. The number of new teachers hired includes only successful matches between positions and teacher candidates, and not positions that went unfilled or which were filled by out-of-field teachers.

Table 14
Newly Certified Teachers*

Programs	1 Number Certified	2 Number as a Percentage of All Fields	3 Number of New Teachers Fall 1985**	4 Number Certified as a Percentage of New Hires	5 Number Certified as a Percentage of All Fields
Elem. Educ.	1,978	35.3	1,417	27.4	139.6
English	427	7.6	566	11.0	75.5
Math	274	4.9	399	7.7	68.7
Science	460	8.2	501	9.7	91.9
For. Lang.	215	3.8	172	3.3	124.8
Emot. Handi.	146	2.6	171	3.3	85.5

*First time certificates issued during 1984-85. Taken from Appendix Table A9.
**Taken from Col. 1, Table A2.

Nevertheless, comparing the number of certificates issued and the number of new teachers hired helps to pinpoint areas of shortages. Table 14, for instance, shows that more certificates were issued in elementary education than the number of new teachers hired in this field, while the

[4]The number of new teachers hired is taken from Col. 2, Appendix Table A1, the number of certified new hires who did not teach last year in a Florida school district.

opposite is true for English, mathematics, science, and the education for the emotionally handicapped. We must surmise that the additional teachers hired in these fields, over and above the number of new certificates issued, were found among teacher candidates who were not teaching in the public schools the prior year--returning teachers, teachers from nonpublic schools, and other certifiable individuals who were not teaching for one reason or another.

One additional item from the Active Certificate File which was used in last year's report was the college or university where the teacher candidates completed their work. This information was used to classify each certificate as "in Florida" or "out of Florida." It was noted in last year's report that only two thirds of the records had this item coded. When this year's computer report was generated, it was discovered that only one third of the records included this item. Analysts were unable to determine when or how the information had been lost between the coding and retrieval processes. Because it seemed unwise to generalize from only one third of the records, discussion of the important topic of the proportion of Florida teachers in each subject field coming from out of state had to be omitted from this year's report.

Supply: Graduates of Teacher Education Programs

Historically, Florida teacher education graduates fill only about thirty-five to forty percent of the teacher vacancies occurring in the state each year. The other sixty percent or so are filled by graduates of teacher education programs from outside the state. These in-state programs, however, are vital to the state's effort to meet its projected need for qualified, appropriately certified, new teachers.

Knowing how many recent graduates there were in each subject area and how many are projected to graduate over the next few years can help the state in two ways. First, this information tells us how many teachers in critical teacher areas may be available to teach in the near future. And, second, an analysis of the subject area choices of recent and prospective teacher education graduates can provide an indication of whether the state is having any success at all in influencing the career choices of young people, in encouraging them both to enter education and to choose fields where there are the greatest needs.

To provide such information, each year a survey of projected teacher education graduates by subject field is collected for the Department of Education by the Florida Association of Colleges for Teacher Education. This section presents information on graduates expecting to become classroom teachers from the survey taken in fall 1984.

As shown in Table 15, the number of graduates in 1983-84 was larger than projected--3,103 projected graduates compared to 3,335 actual. A decrease is projected for 1984-85 (3,248 graduates), with subsequent increases projected for 1985-86 and 1986-87.

Table 15
Number of Graduates
Teacher Education Programs
Selected Fields*

Subject Fields	1 1983-84 Projected**	2 1983-84 Actual	3 1984-85 Projected	4 1985-86 Projected	5 1986-87 Projected
Tot. Basic	2,341	2,494	2,411	2,628	2,731
Tot. Excep.	577	697	710	740	765
Tot. Voc.	185	144	127	149	146
Total	3,103	3,335	3,248	3,517	3,642

*Taken from Appendix Table A10.

Although, overall, more students graduated in 1983-84 than were projected, some teaching fields had fewer graduates than anticipated. Table 16 compares the number of projected graduates with the actual number of graduates for the last three years for seven selected fields. As indicated in the last column, during 1983-84 fewer students than expected graduated in teacher education programs in English, science, mathematics, and emotionally handicapped, all of which were designated critical teaching areas by the State Board of Education in September 1985.

Table 16 further shows that the relationship between projected and actual graduates in the field has not been consistent. For example, in contrast to 1983-84, significantly larger numbers of students graduated in 1982-83 from programs in science, mathematics, and foreign languages than had been projected. Elementary education teachers were overprojected for 1982-83 and 1983-84, but underprojected for 1981-82.

Table 16
Number of Graduates
Teacher Education Programs
Compared to Projected

	1981-82			1982-83			1983-84		
Subject Fields	1 Proj.	2 Actual	3 Percent. (2/1)	4 Proj.	5 Actual	6 Percent. (5/4)	7 Proj.	8 Actual	9 Percent. (8/7)
Elem. Educ.	1,453	1,232	84.8	1,183	1,296	109.6	1,172	1,446	123.3
English	132	133	100.8	154	134	86.7	132	120	90.9
Math	106	52	49.1	65	89	136.9	128	75	58.6
Science	55	35	63.6	61	83	135.2	108	66	60.9
For. Lang.	29	20	69.0	19	26	136.8	29	27	93.1
SLD	227	224	98.7	218	191	87.5	162	236	145.6
Emot. Handi.	151	120	79.5	119	114	95.5	107	91	85.4

If the projections for 1985 and 1986 do prove to be on target, however, it would seem that prospective teachers may be taking seriously the need for teachers in the designated critical teaching areas of English, mathematics, science, foreign languages, and emotionally handicapped. Projections for these fields (Table 17) show an upward trend. This is further seen in Table 18, which shows that projections in these fields represent an increasing percentage of all education graduates.

Table 19 lists three fields which represent decreasing percentages of all fields--elementary education, health/physical education, and art, all fields which have not been facing shortages.

Earlier, two uses were suggested for information on teacher education graduates: (1) determining supply and (2) evaluating changes in trends by subject fields. The question of the adequacy of the supply of teachers by subject will be discussed later in connection with demand. As for the effectiveness of current strategies for influencing change, the information summarized above seems to indicate that the state has been only modestly, if at all, successful in changing the trends. Although increases are projected both in the total number of teacher education graduates and in graduates in certain critical fields, all of these increases are small. It is impossible to know whether such small annual changes taken altogether over the next few years will be enough to narrow the gap between the supply and demand for new teachers.

Any optimism about these increases must also be qualified by the fact that, as was shown in Table 16, projections in the past have not always been realized. In two out of the past three years, colleges and departments of education have overprojected graduates in such critical fields as science and mathematics and underprojected them in fields such as elementary education. This is not to say that those responsible for making projections are remiss, but more likely that predicting which students will finish in which fields in any given year has proved difficult.

PROJECTED SUPPLY AND DEMAND

Understanding current trends is important to planning, but even more important is knowing what these trends might look like in the future. This section makes projections of the number of teachers needed by subject field through the year 2000, compares demand with projected supply for 1986-87, and comments on general overall differences between supply and demand through the end of the century from the standpoint of demographic trends.

Table 17
Estimated Number of Graduates
From Teacher Education Programs*

Subject Fields	1 1983-84 Projected	2 1983-84 Actual	3 1984-85 Projected	4 1985-86 Projected	5 1986-87 Projected
Elem. Educ.	1,172	1,446	1,315	1,422	1,449
English	132	120	144	158	166
Math	128	75	106	143	158
Science	108	66	70	104	127
For. Lang.	29	27	37	36	44
SLD	162	236	242	251	263
Emot. Handi.	107	91	97	113	123

*Taken from Appendix Table A10.

Table 18
Number of Teacher Education Graduates
Selected Fields Which Represent
An Increasing Percentage of All Fields*

Subject Fields	1 1983-84 Actual	2 1984-85 Projected	3 1985-86 Projected	4 1986-87 Projected
English	3.55	4.37	4.44	4.51
Math	2.23	3.22	4.01	4.28
Science	1.94	2.13	2.91	3.44
For. Lang.	0.80	1.13	1.01	1.20
Emot. Handi.	2.71	2.95	3.18	3.33

*Taken from Appendix Table A11.

Table 19
Number of Teacher Education Graduates
Selected Fields Which Represent
A Decreasing Percentage of All Fields*

Subject Fields	1 1983-84 Actual	2 1984-85 Projected	3 1985-86 Projected	4 1986-87 Projected
Elem. Educ.	43.34	40.49	40.43	39.79
Health/PE	9.78	9.54	8.84	8.84
Art	2.04	2.00	1.71	1.51

*Taken from Appendix Table A11.

Projections: Demand

Long-range projections of teacher needs for Florida may be seen in Tables 20-22, drawn from Appendix Tables A12 and A13. The number of additional teachers needed each year is based on enrollment projections and on the number of teachers terminating. More specifically, the projections shown in these tables are based on four data sources: (1) for ratios between the numbers of teachers and student enrollment, the Department of Education's Course Data File, which provides information on the current number of students and teachers in each course; (2) for an overall termination rate, teacher terminations for 1983-84; (3) for the distribution of the total number of teacher terminations by subject field, the fall 1984 teacher vacancy report (Part V of the Teacher Staff Survey); and (4) long-range projections of full-time-equivalent enrollments for grades K-6 and 7-12, as based on age-group population projections.

In assessing future teacher needs, projections were first made of the number of teachers needed. The base of the calculations for each year's projections was the number of teachers the prior year. Using this number, estimates were made of the number of teacher terminations by subject field for that year and the differences in the number of teachers needed because of enrollment increases (or, in some cases in grades 7-12, decreases). These two items together equal the number of additional teachers needed, shown for each program area in Table 20, and for selected fields in Table 21.

Table 22 presents totals for each of the components shown in Tables 20-21. Column 1 of Table 22 gives the estimated number of teachers in these selected fields for 1984-85. The number of teachers expected to terminate during 1984-85 (Column 2) was calculated by multiplying the total number of teachers for 1984-85 times the termination rate for the most recent year (6.8 percent), and disaggregating this total by subject field according to the distribution of vacancies during fall 1984. Column 3 indicates the difference between the number of teachers needed for 1985-86--based on enrollment projections--and the number for 1984-85. Column 4 is the summation of Columns 2-3, and Column 5 gives the total number of teachers projected for 1985-86. Projections for 1986-87 are shown in Columns 6-9. (Similar information through the year 2000 is shown in Appendix Tables A13-A14.)

Taken as a whole, public school enrollments are projected to increase significantly over the coming years. In the short term this growth will be in the elementary grades, as the echo effect of the post-World War II baby boom, which began to be felt in kindergartens all over the state in fall 1984, moves through the education system. The impact of these increases will not reach the secondary level until the early

Table 20
Projected Number of Teachers Needed
Through the Year 2001
Selected Fields

Subject Fields	Additional Teachers Needed*					
	1985-86	1986-87	1987-88	1990-91	1995-96	2000-01
Tot. Basic	5,705	5,437	5,566	6,634	7,502	6,491
Tot. Excep.	1,336	1,307	1,336	1,352	1,576	1,460
Tot. Voc.	531	394	328	302	900	706
Total	7,572	7,137	7,230	8,288	9,978	8,657

*Taken from Appendix Table A12.

Table 21
Projected Number of Teachers Needed
Through the Year 2001
Selected Fields

Subject Fields	Additional Teachers Needed*					
	1985-86	1986-87	1987-88	1990-91	1995-96	2000-01
Elem. Educ.	2,117	2,347	2,670	3,617	2,173	1,893
English	763	628	564	547	1,187	1,017
Math	540	446	403	400	837	709
Science	656	577	541	540	955	872
Soc. Stud.	444	362	324	315	696	589
For. Lang.	214	194	186	195	303	277

*Taken from Appendix Table A12.

Table 22
Number of Teachers Expected to Terminate
and Projected Need
Through 1987-88*

Programs	1985-86	1986-87				1987-88			
	Total	TERM	GRO	NEED	TOT	TERM	GRO	NEED	TOT
Elem. Educ.	31,638	1,511	606	2,117	32,244	1,541	806	2,347	33,050
English	7,669	630	134	763	7,803	642	-14	628	7,789
Math	5,813	438	102	540	5,915	447	-1	446	5,914
Science	4,798	572	84	656	4,881	583	-6	577	4,875
Soc. Stud.	4,724	361	83	444	4,807	369	-6	362	4,801
For. Lang.	1,689	184	30	214	1,719	188	6	194	1,725
Tot. Basic	68,755	4,441	1,264	5,705	70,019	4,529	908	5,437	70,927
Tot. Excep.	9,978	1,023	313	1,336	10,291	1,043	264	1,307	10,555
Tot. Voc.	7,531	399	131	531	7,662	407	-14	394	7,649
Total	86,264	5,863	1,709	7,572	87,973	5,979	1,158	7,137	89,131

*Taken from Appendix Table A13.

1990's. While enrollments in grades K-6 will continue to grow almost until the end of the century, enrollments in grades 7-12 are projected to decline from 1985-86 to 1990-91, at which time they will begin a sharp increase that will last well beyond the year 2000.

To express these trends in numbers, compared to 1984-85, enrollments in grades K-6 will be 25 percent higher in 1990, 37 percent higher in 1995, and 36 percent higher in 2000. Using the same 1984-85 base year, enrollments in grades 7-12 will be about 6 percent lower in 1990, 12 percent higher in 1995, and 32 percent higher in 2000.

Because such critical fields as mathematics and science are mainly junior and senior high school subjects, enrollments in these fields will be lower in 1990-91 than they were in 1984-85. However, the state will need a significant number of new teachers each year to take the place of resigning teachers. Beyond 1990 the need becomes much more critical because of increases in enrollments in grades 7-12.

Table 23 looks at the immediate needs that will face the state in 1986-87. In addition to teacher demand generated by enrollments in grades K-12 enrollments and by teacher terminations, Table 23 also projects (1) the number of teachers needed to staff additional classes to enable high school students to meet new state graduation requirements and (2) the number needed to staff each class with a teacher fully certified in the appropriate subject field.

Table 23
Projected Teacher Demand
1986-87*

Subject Fields	1 Number Needed Due to Enrollment Growth	2 Number Needed to Replace Resigning Teachers	3 Number Needed for Program Growth	4 Number Needed to Replace Teachers Now Teaching Out of Field	5 Total
Elem. Educ.	806	1,541	0	286	2,633
English	-15	642	120	569	1,317
Math	-2	447	80	405	931
Science	-7	583	97	466	1,139
Soc. Stud.	-7	369	347	377	1,086
For. Lang.	6	188	0	114	307
Emot. Handi.	87	233	72	67	459
Tot. Basic	906	4,529	644	2,697	8,776
Tot. Excep.	264	1,043	255	557	2,119
Tot. Voc.	-11	407	0	669	1,065
Total	1,158	5,979	899	3,923	11,960

*Taken from Appendix Table A15.

The numbers shown for this last component of teacher demand are useful because they serve as a reminder that out-of-field teachers are to some degree related to a need for more teachers certified in the fields where they are needed. However, as indicated earlier, the use of out-of-field teachers is often indicative more of scheduling problems than of shortages of certified personnel. Furthermore, the number of full-time-equivalent teachers does not correspond to the number of individual teachers needed. If five different schools each have one teacher teaching general mathematics out of field for one hour a day--which would total roughly one FTE teacher--locating a qualified mathematics teacher will not solve the problem because the need is spread out over five different locations.

Because it is unclear how many districts will adopt the seven-period day or how those who choose to do so will secure the extra staff, these projections do not take into account the implementation of this program. Indications are that districts are hiring new teachers to fill these classes rather than paying experienced teachers a supplement to extend their teaching day. This could be seen in the higher-than-anticipated numbers of vacancies in fall 1984, as discussed in the first section.

Projections: Teacher Supply Compared with Demand, 1986-87

Projections of graduates of teacher education programs are available only through 1986-87. In the absence of these or any other projections of teacher supply beyond that year, this report focuses on detailed projections of supply and demand for 1986-87, and then makes only general forecasts of teacher supply for the fifteen years beyond.

Table 24 gives the projected number of teachers needed in 1986-87 in the broad program areas and in selected subject fields (Column 1-2) as well as two components of teacher supply. Teacher supply is measured here by the projected number of Florida teacher education graduates for 1986-87 (Column 3) and the percentage of certificates granted to out-of-state teachers for 1983-84, the most recent data year.

The fields listed in Table 24 include the five designated critical teacher shortage areas by the State Board of Education for 1986-87: mathematics, science, emotionally handicapped, English, and foreign languages. Also included, for reference, is elementary education, comprising all the regular grade K-6 classroom teachers. Given these projections for 1986-87, the numbers of Florida graduates in the five shortage areas (disregarding the number of teachers teaching out of field) represent as little as 15 percent of the need in science and 19 percent in foreign languages. By

Table 24
Projected Teacher Supply and Demand
1986-87

Subject Fields	1 Number Teachers Needed Excluding Current Out of Field	2 Number Teachers Need Including Current Out of Field	3 Proj. Florida Education Graduates 1984-85	4 Estimated Percentage New Teachers Out of State
Elem. Educ.	2,347	2,633	1,422	62.1
English	749	1,318	158	71.1
Math	526	931	143	68.9
Science	674	1,140	104	64.8
For. Lang.	194	308	36	82.0
Emot. Handi.	392	601	113	23.5
Tot. Basic	6,081	8,796	2,620	65.2
Tot. Excep.	1,562	2,312	737	53.2
Tot. Voc.	394	676	149	70.1
Total	8,036	11,784	3,506	63.9

*Taken from Appendix Table A15.

contrast, the number of anticipated Florida graduates in elementary education meets 61 percent of the need.

If the same percentages of out-of-state teachers are assumed--a risky assumption since these same fields are in critical need throughout the nation--the projected supply represents less than half of the need in emotionally handicapped and science and about two thirds of the need in English. If the number of out-of-field teachers was to be included in the equation, even with the most optimistic assumptions about the availability of out-of-state teacher candidates, the supply would fill less than half of the positions in these critical fields.

Projections: Beyond 1985

As has been stated, projections of graduates of teacher education programs are available only through 1986-87. There are good reasons why long-term projections are available for grade K-12 programs but only short-term projections for graduates of teacher education programs. Enrollments in K-12 programs are chiefly a product of demographic trends. Enrollments within particular higher education programs, however, are determined not only by demography but also by such factors as current economic conditions, perceived future employment opportunities, the level of salaries and other benefits offered by various occupations, and the relative social status of competing occupations. Therefore, attempts here to make long-range projections of teacher supply are limited to demographic projections of those age groups which provide the largest potential pool for new teachers.

During the next few years the state can expect annual overall enrollment increases of from 30,000 to 50,000--or from 2 to 3 percent--with steady increases continuing until at least the year 2000. Trends by grade level show irregularities not seen when viewing the education system as a whole. Table 25 looks at the percentage of differences at five-year intervals in enrollments at the elementary and secondary level, and the corresponding population differences in the 22-24 and 25-29 age groups, the age groups which might be regarded as providing the biggest pool for beginning teachers. The base year for these comparisons is 1980, the last census year.

Table 25 projects a 22-percent increase in grades K-6 enrollments from 1985 to 1990 and a 10-percent increase from 1990 to 1995. Enrollments at grades 7-12 are projected to decrease by 8 percent from 1985 to 1990, but increase by 20 percent from 1990 to 1995 and by 18 percent from 1995 to 2000.

Table 25
Percentage Change
In Enrollments, Numbers of Teachers
and Number of Young Adults
1980-2000

	PERCENTAGE CHANGE			
	1980 to 1985	1985 to 1990	1990 to 1995	1995 to 2000
Grades K-6	2.3	22.2	9.8	-0.4
Grades 7-12	4.8	-7.9	19.7	17.5
Total	3.4	7.9	13.8	7.2
Number of Classroom Teachers	9.6	7.4	14.1	7.7
Ages 22-24	11.7	-10.7	4.1	-9.4
Ages 25-29	20.4	6.9	-10.7	-1.6
Total	16.9	0.2	-5.7	-4.5

The projected changes in the 22-24-year-old and 25-29-year-old age groups provide a sharp contrast to the K-12 trends. During the 1980-85 period, when the youngest of the children born during the post-World War II baby boom were becoming adults, these age groups increased by 17 percent. What is significant, therefore, is that the state has been experiencing shortages in specific teaching fields during a period when, on one hand, school enrollments have tended to be stable and, on the other, the pool of potential teachers has been increasing.

The next fifteen years present a completely different demographic picture. As indicated in Table 25, the number of 22 to 24 year olds is projected to decrease by 7 percent from

1985 to 1990 and by 6 percent more by 2000. According to the same projections, the 25-29 year age group, still feeling the impact of the baby boom, will increase by 7 percent from now until 1990, followed by a decrease of 12 percent from 1990 to 2000.

The nation as a whole, without the high in-migration trends historically experienced by Florida, will doubtless see proportionately larger decreases than those shown in Table 25. Thus the pool of out-of-state new teachers on which Florida has long relied can be expected to decrease at an even a faster rate than the in-state pool.

These two trends--projected increased enrollments in grades K-12 and a projected smaller potential teacher pool--taken together present a bleak picture for a long-term balance between teacher supply and demand in Florida. The five years from 1985 to 1990 will mark the beginning of a significant decrease in the size of the teacher pool. It is fortunate that during that period secondary school enrollments will also be decreasing. However, as has been pointed out, the current shortages have occurred during a period when the size of the potential teacher pool was increasing. Therefore, it would seem that, unless the state can influence many more people to make teaching their career choice or can tap additional groups of potential teachers in addition to young adults, the state will find it much harder to fill positions in critical fields in the next five years than it did during the five prior years. And beyond 1990 the potential imbalance between supply and demand is even more critical, as the size of the potential teacher pool continues to decline at the same time that secondary school enrollments are sharply increasing.

Appendix

Table A1: Estimated Number of Vacancies, Florida School Districts, Fall 1984

Table A2: Estimated Number of New Teachers Needed, Florida School Districts, Fall 1984

Table A3: Analysis of New Hires, Florida School Districts, Fall 1984

Table A4: Analysis of Vacancies, Florida School Districts, Fall 1984

Table A5: Percentage Change in Number of Teacher Vacancies, Fall 1982 - Fall 1984

Table A6: Number of Teacher Vacancies, Fall 1982 - Fall 1984

Table A7: Number of Teacher Vacancies, Fall 1983 - Fall 1984, By School District

Table A8: Number of Teachers Teaching Out of Field

Table A9: Newly Certified Teachers

Table A10: Estimated Number of Graduates From Teacher Education Programs, Survey Completed Fall 1984

Table A11: Number of Teacher Education Graduates, As a Percentage of All Fields

Table A12: Projected Number of Teachers Needed Through 2000-01

Table A13: Number of Teachers Expected to Terminate and Projected Need Through 1988-89

Table A14: Number of Teachers Expected to Terminate and Projected Need From 1989-90 to 2000-01

Table A15: Projected Teacher Supply and Demand 1985-86

Table A1
Estimated Number of Vacancies
Florida School Districts
Fall 1984

Subject Fields	NEW HIRES: Certified: Taught Last Year in Another Florida School District	NEW HIRES: Certified: Did Not Teach Last Year In a Florida School District	NEW HIRES: Not Certified In the Appropriate Field	Total Number of New Hires	Number of Unfilled Vacancies	Total Number of Vacancies
Elem. Educ.	441	1,417	78	1,937	95	2,032
El. Read. Spec.	8	24	2	34	1	35
English	170	566	58	794	53	847
Math	95	399	75	570	19	589
Science	99	501	124	725	44	769
Soc. Stud.	84	348	35	467	19	486
For. Lang.	36	172	24	232	16	248
Health/PE	63	270	13	346	12	358
Art	17	123	3	143	7	150
Music	49	175	6	230	10	240
Other	34	152	16	202	16	218
Tot. Basic	1,101	4,144	435	5,680	292	5,972
Ment. Handi.	33	149	33	215	24	239
Occ./Phy. Ther.	0	18	0	18	16	34
Phy. Imp.	4	8	2	14	1	15
Speech Ther.	31	125	10	166	31	197
Hear./Visual	11	34	2	47	1	48
SLD	61	170	40	271	25	296
Emot. Handi.	34	171	71	276	31	307
Gifted	10	33	44	87	14	101
Home/Hos.	5	11	0	16	2	18
Var. Excep.	22	77	10	109	12	121
Tot. Excep.	211	797	211	1,219	156	1,375
Agri.	9	39	3	51	4	55
Bus.	14	110	2	126	9	135
Dist.	5	13	4	22	5	27
Health	1	15	0	16	1	17
Pub. Serv.	1	1	0	2	1	3
Home Econ.	19	107	3	129	6	135
Trades/Ind.	8	129	9	146	19	165
Tot. Voc.	57	413	21	492	45	537
Total	1,372	5,353	~~466~~	7,391	493	7,884

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Table A2
Estimated Number of New Teachers Needed*
Florida School Districts
Fall 1984

Subject Fields	NEW HIRES: Certified Did Not Teach Last Year In a Florida School District	NEW HIRES: Not Certified In the Appropriate Field	Number of Unfilled Vacancies	Total Number of New Teachers Needed
Elem. Educ.	1,417	78	95	1,591
El. Read. Spec.	24	2	1	27
English	566	58	53	677
Math	399	75	19	494
Science	501	124	44	670
Soc. Stud.	348	35	19	402
For. Lang.	172	24	16	212
Health/PE	270	13	12	295
Art	123	3	7	133
Music	175	6	10	191
Other	152	16	16	184
Tot. Basic	4,144	435	292	4,871
Ment. Handi.	149	33	24	206
Occ./Phy. Ther.	18	0	16	34
Phy. Imp.	8	2	1	11
Speech Ther.	125	10	31	166
Hear./Visual	34	2	1	37
SLD	170	40	25	235
Emot. Handi.	171	71	31	273
Gifted	33	44	14	91
Home/Hos.	11	0	2	13
Var. Excep.	77	10	12	99
Tot. Excep.	797	211	156	1,164
Agri.	39	3	4	46
Bus.	110	2	9	121
Dist.	13	4	5	22
Health	15	0	1	16
Pub. Serv.	1	0	1	2
Home Econ.	107	3	6	116
Trades/Ind.	129	9	19	157
Tot. Voc.	413	21	45	480
Total	5,353	666	493	6,512

*This excludes the positions filled by certified teachers who taught last year in another Florida school district.

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Table A3
Analysis of New Hires
Florida School Districts
Fall 1984

Subject Fields	Total Number of New Hires	CERTIFIED: Percentage Taught Last Year in Another Florida School District	CERTIFIED: Percentage Did Not Teach Last Year In a Florida School District	TOTAL NEW HIRES: Percentage Certified In The Appropriate Field	TOTAL NEW HIRES: Percentage Not Certified In The Appropriate Field
Elem. Educ.	1,937	23.7	76.3	96.0	4.0
El. Read. Spec.	34	25.0	75.0	94.1	5.9
English	794	23.1	76.9	92.7	7.3
Math	570	19.3	80.7	86.8	13.2
Science	725	16.5	83.5	82.9	17.1
Soc. Stud.	467	19.5	80.5	92.5	7.5
For. Lang.	232	17.3	82.7	89.8	10.2
Health/PE	346	18.9	81.1	96.4	3.6
Art	143	12.1	87.9	97.8	2.2
Music	230	21.8	78.2	97.2	2.8
Other	202	18.2	81.8	91.9	8.1
Tot. Basic	5,680	21.0	79.0	92.3	7.7
Ment. Handi.	215	18.0	82.0	84.7	15.3
Occ./Phy. Ther.	18	0.0	100.0	100.0	0.0
Phy. Imp.	14	30.0	70.0	85.7	14.3
Speech Ther.	166	20.0	80.0	93.9	6.1
Hear./Visual	47	25.0	75.0	95.7	4.3
SLD	271	26.4	73.6	85.3	14.7
Emot. Handi.	276	16.6	83.4	74.4	25.6
Gifted	87	23.1	76.9	49.4	50.6
Home/Hos.	16	33.3	66.7	100.0	0.0
Var. Excep.	109	22.4	77.6	91.3	8.7
Tot. Excep.	1,219	21.0	79.0	82.7	17.3
Agri.	51	17.8	82.2	94.1	5.9
Bus.	126	11.4	88.6	98.4	1.6
Dist.	22	27.8	72.2	81.8	18.2
Health	16	8.3	91.7	100.0	0.0
Pub. Serv.	2	50.0	50.0	100.0	0.0
Home Econ.	129	14.9	85.1	97.7	2.3
Trades/Ind.	146	5.9	94.1	93.6	6.4
Tot. Voc.	492	12.2	87.8	95.7	4.3
Total	7,391	20.4	79.6	91.0	9.0

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Table A4
Analysis of Vacancies
Florida School Districts
Fall 1984

Subject Fields	Estimated Number of Vacancies	VACANCIES: Percentage Filled By New Hires Certified In The Appropriate Field	VACANCIES: Percentage Filled By New Hires Not Certified In The Appropriate Field	VACANCIES: Percentage Unfilled	Vacancies Unfilled or Filled Out of Field: Number	Vacancies Unfilled or Filled Out of Field: Percentage
Elem. Educ.	2,032	91.5	3.8	4.7	173	8.5
El. Read. Spec.	35	91.4	5.7	2.9	3	8.6
English	847	86.9	6.9	6.2	111	13.1
Math	589	84.0	12.8	3.2	94	16.0
Science	769	78.1	16.2	5.7	168	21.9
Soc. Stud.	486	88.8	7.2	3.9	54	11.2
For. Lang.	248	84.0	9.5	6.5	40	16.0
Health/PE	358	93.1	3.5	3.4	25	6.9
Art	150	93.3	2.1	4.7	10	6.7
Music	240	93.2	2.6	4.2	16	6.8
Other	218	85.2	7.5	7.3	32	14.8
Tot. Basic	5,972	87.8	7.3	4.9	726	12.2
Ment. Handi.	239	76.2	13.8	10.0	57	23.8
Occ./Phy. Ther.	34	53.7	0.0	46.3	16	46.3
Phy. Imp.	15	80.0	13.3	6.7	3	20.0
Speech Ther.	197	79.1	5.1	15.7	41	20.9
Hear./Visual	48	93.7	4.3	2.1	3	6.3
SLD	296	78.3	13.5	8.3	64	21.7
Emot. Handi.	307	66.9	23.0	10.1	102	33.1
Gifted	101	42.6	43.6	13.9	58	57.4
Home/Hos.	18	88.9	0.0	11.1	2	11.1
Var. Excep.	121	82.2	7.9	9.9	22	17.8
Tot. Excep.	1,375	73.3	15.3	11.3	367	26.7
Agri.	55	87.3	5.5	7.3	7	12.7
Bus.	135	91.8	1.5	6.7	11	8.2
Dist.	27	66.7	14.8	18.5	9	33.3
Health	17	94.1	0.0	5.9	1	5.9
Pub. Serv.	3	66.7	0.0	33.3	1	33.3
Home Econ.	135	93.3	2.2	4.4	9	6.7
Trades/Ind.	165	82.8	5.7	11.5	28	17.2
Tot. Voc.	537	87.6	4.0	8.4	66	12.4
Total	7,884	85.3	8.5	6.2	1,159	14.7

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Table A5
Percentage Change in Number of Teacher Vacancies
Fall 1982 - Fall 1984

Subject Field	Vacancies Fall 1982	Vacancies Fall 1983	Percentage Change	Vacancies Fall 1984	Percentage Change
Elem. Educ.	1,695	1,742	2.8	2,032	16.6
El. Read. Spec.	61	29	-52.5	35	20.7
English	592	739	24.8	847	14.5
Math	401	437	9.0	589	34.8
Science	345	497	44.1	769	54.7
Soc. Stud.	211	298	41.2	486	63.1
For. Lang.	85	107	25.9	248	131.8
Health/PE	301	254	-15.6	358	40.9
Art	92	85	-7.6	150	76.5
Music	234	226	-3.4	240	6.2
Other	146	228	56.2	218	-4.4
Tot. Basic	4,163	4,642	11.5	5,972	28.6
Ment. Handi.	233	202	-13.3	239	18.3
Occ./Phy. Ther.	29	30	3.4	34	11.7
Phy. Imp.	10	17	70.0	15	-11.8
Speech Ther.	185	163	-11.9	197	20.9
Hear./Visual	60	49	-18.3	48	-2.0
SLD	288	284	-1.4	296	4.0
Emot. Handi	264	261	-1.1	307	17.6
Gifted	68	74	8.8	101	36.5
Home/Hos.	5	14	180.0	18	28.6
Var. Excep.	99	91	-8.1	121	33.0
Tot. Excep.	1,241	1,185	-4.5	1,375	16.0
Agri.	53	50	-5.7	55	10.0
Bus.	102	98	-3.9	135	37.8
Dist.	24	20	-16.7	27	35.0
Health	25	29	16.0	17	-41.4
Pub. Serv.	13	3	-76.9	3	0.0
Home Econ.	62	65	4.8	135	107.7
Trades/Ind.	183	156	-14.8	165	5.8
Tot. Voc.	462	421	-8.9	537	27.6
Total	5,866	6,248	6.5	7,884	26.2

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Table A6
Number of Teacher Vacancies
Fall 1982 - Fall 1984

Subject Field	Vacancies			Vacancies in Each Field as a Percentage of All Vacancies		
	Fall 1982	Fall 1983	Fall 1984	Fall 1982	Fall 1983	Fall 1984
Elem. Educ.	1,695	1,742	2,032	28.9	27.9	25.8
El. Read. Spec.	61	29	35	1.0	0.5	0.4
English	592	739	847	10.1	11.8	10.7
Math	401	437	589	6.8	7.0	7.5
Science	345	497	769	5.9	8.0	9.8
Soc. Stud.	211	298	486	3.6	4.8	6.2
For. Lang.	85	107	248	1.4	1.7	3.1
Health/PE	301	254	358	5.1	4.1	4.5
Art	92	85	150	1.6	1.4	1.9
Music	234	226	240	4.0	3.6	3.0
Other	146	228	218	2.5	3.6	2.8
Tot. Basic	4,163	4,642	5,972	71.0	74.3	75.7
Ment. Handi.	233	202	239	4.0	3.2	3.0
Occ./Phy. Ther.	29	30	34	0.5	0.5	0.4
Phy. Imp.	10	17	15	0.2	0.3	0.2
Speech Ther.	185	163	197	3.2	2.6	2.5
Hear./Visual	60	49	48	1.0	0.8	0.6
SLD	288	284	296	4.9	4.5	3.7
Emot. Handi.	264	261	307	4.5	4.2	3.9
Gifted	68	74	101	1.2	1.2	1.3
Home/Hos.	5	14	18	0.1	0.2	0.2
Var. Excep.	99	91	121	1.7	1.5	1.5
Tot. Excep.	1,241	1,185	1,375	21.2	19.0	17.4
Agri.	53	50	55	0.9	0.8	0.7
Bus.	102	98	135	1.7	1.6	1.7
Dist.	24	20	27	0.4	0.3	0.3
Health	25	29	17	0.4	0.5	0.2
Pub. Serv.	13	3	3	0.2	0.0	0.0
Home Econ.	62	65	135	1.1	1.0	1.7
Trades/Ind.	183	156	165	3.1	2.5	2.1
Tot. Voc.	462	421	537	7.9	6.7	6.8
Total	5,866	6,248	7,884	100.0	100.0	100.0

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Table A7
Number of Teacher Vacancies
Fall 1983 - Fall 1984
By School District

Counties	Fall 1983							Fall 1984							Percentage Change in Total Vacancies 1983-1984
	New Hires		Positions		Percentage Vacancies		Vacancies as a Percentage of all Teachers	New Hires		Positions		Percentage Vacancies		Vacancies as a Percentage of all Teachers	
	In Field	Out of Field	Unfilled	Total Vac.	In Field	Unfilled/ Out of Field		In Field	Out of Field	Unfilled	Total Vac.	In Field	Unfilled/ Out of Field		
Alachua	31	1	0	132	99.2	0.8	11.3	203	9	2	214	94.9	5.1	16.6	62.1
Baker	14	7	1	22	63.6	36.4	11.6	34	10	1	45	75.6	24.4	23.3	104.5
Bay	65	8	0	73	89.0	11.0	6.5	80	27	1	108	74.1	25.9	9.4	47.9
Bradford	17	1	1	19	89.5	10.5	7.9	17	3	2	22	77.3	22.7	7.9	15.8
Brevard	68	7	42	117	58.1	41.9	5.0	74	55	0	129	57.4	42.6	5.1	10.3
Broward	252	4	56	312	80.8	19.2	4.7	502	5	51	558	90.0	10.0	8.3	78.8
Calhoun	2	3	0	5	40.0	60.0	4.5	4	1	0	5	80.0	20.0	4.6	0.0
Charlotte	46	0	0	46	100.0	0.0	11.2	63	2	2	67	94.0	6.0	15.7	45.7
Citrus	63	5	2	70	90.0	10.0	13.5	86	0	0	86	100.0	0.0	15.8	22.9
Clay	83	11	4	98	84.7	15.3	10.8	108	15	4	127	85.0	15.0	13.3	29.6
Collier	72	3	0	75	96.0	4.0	9.9	97	8	3	108	89.8	10.2	12.9	44.0
Columbia	20	3	2	25	80.0	20.0	6.5	39	5	0	44	88.6	11.4	11.2	76.0
Dade	570	400	18	988	57.7	42.3*	8.0	50	200	27	277	18.1	81.9*	2.2	-72.0
Desoto	17	2	0	19	89.5	10.5	9.2	29	0	0	29	100.0	0.0	12.6	52.6
Dixie	7	2	1	10	70.0	30.0	10.6	9	1	0	10	90.0	10.0	10.2	0.0
Duval	230	22	32	284	81.0	19.0	5.4	406	15	9	430	94.4	5.6	8.2	51.4
Escambia	94	6	0	100	94.0	6.0	4.3	219	4	0	223	98.2	1.8	9.1	123.0
Flagler	28	0	0	28	100.0	0.0	21.4	18	0	0	18	100.0	0.0	13.8	-35.7
Franklin	16	0	0	16	100.0	0.0	16.5	18	0	0	18	100.0	0.0	16.4	12.5
Gadsden	27	0	1	28	96.4	3.6	5.9	31	0	2	33	93.9	6.1	6.8	17.9
Gilchrist	10	0	1	11	90.9	9.1	12.1	21	0	0	21	100.0	0.0	24.1	90.9
Glades	2	0	0	2	100.0	0.0	4.0	12	1	0	13	92.3	7.7	25.0	550.0
Gulf	4	1	0	5	80.0	20.0	4.3	13	4	0	17	76.5	23.5	12.9	240.0
Hamilton	5	2	0	7	71.4	28.6	5.6	16	5	0	21	76.2	23.8	16.3	200.0
Hardee	32	2	0	34	94.1	5.9	13.6	22	2	1	25	88.0	12.0	10.0	-26.5
Hendry	45	4	2	51	88.2	11.8	19.0	56	8	2	66	84.8	15.2	22.7	29.4
Hernando	37	10	1	48	77.1	22.9	11.7	71	6	5	82	86.6	13.4	18.4	70.8
Highlands	26	0	0	26	100.0	0.0	6.3	46	3	3	52	88.5	11.5	12.4	100.0
Hillsborough	314	31	77	422	74.4	25.6	7.1	435	59	70	564	77.1	22.9	8.7	33.6
Holmes	10	1	0	11	90.9	9.1	6.3	16	3	0	19	84.2	15.8	10.0	72.7
Indian River	52	8	0	60	86.7	13.3	11.9	74	6	2	82	90.2	9.8	16.0	36.7
Jackson	33	5	0	38	86.8	13.2	8.4	30	0	0	30	100.0	0.0	6.4	-21.1
Jefferson	8	2	0	10	80.0	20.0	7.6	18	4	0	22	81.8	18.2	16.2	120.0
Lafayette	5	0	2	7	71.4	28.6	12.3	5	1	0	6	83.3	16.7	10.9	-14.3
Lake	90	12	0	102	88.2	11.8	10.6	101	21	9	131	77.1	22.9	13.1	28.4

Lee	167	2	0	169	98.8	1.2	10.1	99	48	20	167	59.3	40.7	9.6	-1.2
Leon	118	3	5	126	93.7	6.3	9.6	131	6	7	144	91.0	9.0	10.7	14.3
Levy	23	4	6	33	69.7	30.3	13.7	38	6	0	44	86.4	13.6	16.9	33.3
Liberty	6	2	0	8	75.0	25.0	13.3	7	0	0	7	100.0	0.0	11.1	-12.5
Madison	11	2	0	13	84.6	15.4	7.0	36	2	0	38	94.7	5.3	20.4	192.3
Manatee	71	5	0	76	93.4	6.6	6.1	101	3	0	104	97.1	2.9	8.3	36.8
Marion	114	19	2	135	84.4	15.6	10.4	159	24	0	183	86.9	13.1	12.8	35.6
Martin	56	4	11	71	78.9	21.1	13.4	96	7	8	111	86.5	13.5	19.1	56.3
Monroe	39	3	2	44	88.6	11.4	10.9	54	0	0	54	100.0	0.0	13.8	22.7
Nassau	32	7	1	40	80.0	20.0	11.0	34	8	3	45	76.4	23.6	11.9	11.2
Okaloosa	58	4	0	62	93.5	6.5	4.8	105	4	0	109	96.3	3.7	8.0	75.8
Okeechobee	46	8	1	55	83.6	16.4	21.1	28	2	1	31	90.3	9.7	11.6	-43.6
Orange	362	25	62	449	80.6	19.4	9.5	411	30	53	494	83.2	16.8	10.2	10.0
Osceola	70	1	6	77	90.9	9.1	14.2	71	1	5	77	92.2	7.8	13.2	0.0
Palm Beach	191	22	46	259	73.7	26.3	6.1	396	37	112	545	72.7	27.3	12.1	110.4
Pasco	101	7	8	116	87.1	12.9	8.0	188	5	8	201	93.5	6.5	13.0	73.3
Pinellas	222	13	8	243	91.4	8.6	4.9	573	0	21	594	96.5	3.5	11.3	144.4
Polk	216	31	6	253	85.4	14.6	7.4	222	66	11	299	74.2	25.8	8.1	18.2
Putnam	55	4	3	62	88.7	11.3	10.7	61	9	4	74	82.4	17.6	12.9	19.4
St. Johns	47	2	0	49	95.9	4.1	9.2	62	4	1	67	92.5	7.5	12.2	36.7
St. Lucie	54	8	11	73	74.0	26.0	9.5	45	72	11	128	35.2	64.8	15.3	75.3
Santa Rosa	44	5	0	49	89.8	10.2	7.1	81	3	0	84	96.4	3.6	11.6	71.4
Sarasota	108	4	0	112	96.4	3.6	8.6	112	8	33	153	73.2	26.8	11.2	36.6
Seminole	175	18	0	193	90.7	9.3	10.0	178	7	5	190	93.7	6.3	9.6	-1.6
Sumter	13	0	0	13	100.0	0.0	5.4	26	0	0	26	100.0	0.0	10.4	100.0
Suwannee	12	3	0	15	80.0	20.0	6.1	32	0	0	32	100.0	0.0	12.3	113.3
Taylor	17	0	0	17	100.0	0.0	9.6	20	0	0	20	100.0	0.0	10.4	17.6
Union	13	0	0	13	100.0	0.0	17.8	18	0	0	18	100.0	0.0	22.2	38.5
Volusia	105	4	2	111	94.6	5.4	5.7	208	27	3	238	87.4	12.6	11.8	114.4
Wakulla	15	0	1	16	93.8	6.3	10.7	17	0	0	17	100.0	0.0	10.6	6.3
Walton	9	3	0	12	75.0	25.0	5.6	14	4	1	19	73.7	26.3	8.6	58.3
Washington	4	4	0	8	50.0	50.0	4.3	18	0	0	18	100.0	0.0	7.8	125.0

*Dade categorizes as "not certified" all new hires in the Beginning Teacher Program and all those whose applications for certification are still pending. Therefore, the percentage shown for out-of-field teachers in Dade is much higher than for other districts.

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Table A8
Number of Teachers Teaching Out of Field*

Subject Fields	Fall 1983 Number of FTE Teachers 1 Total	2 Teaching Out of Field	3 Percentage 2/1	Fall 1984 Number of FTE Teachers 4 Total	5 Teaching Out of Field	6 Percentage 5/4
Elem. Educ.	28,114	185	0.7	28,811	286	1.0
El. Read. Spec.	606	15	2.5	1,079	16	1.4
English	7,369	513	7.0	7,701	569	7.4
Math	5,593	429	7.7	5,805	405	7.0
Science	4,374	389	8.9	4,809	466	9.7
Soc. Stud.	4,408	358	8.1	4,736	377	8.0
For. Lang.	1,348	65	4.8	1,666	114	6.8
Health/PE	4,903	208	4.2	5,005	287	5.7
Art	1,456	37	2.6	1,615	57	3.5
Music	2,165	47	2.2	2,199	34	1.6
Other	1,881	56	3.0	2,075	105	5.1
Tot. Basic	62,217	2,302	3.7	65,500	2,715	4.1
Ment. Handi.	1,750	83	4.7	1,727	74	4.3
Occ./Phy. Ther.	151	1	0.7	173	0	0.0
Phy. Imp.	176	12	6.8	190	8	4.2
Speech Ther.	1,344	15	1.1	1,374	14	1.0
Hear./Visual	382	6	1.7	383	2	0.5
SLD	2,253	137	6.1	2,294	106	4.6
Emot. Handi.	1,154	168	14.5	1,345	210	15.6
Gifted	1,007	193	19.2	1,099	267	24.3
Home/Hos.	268	0	0.0	280	2	0.7
Var. Excep.	1,587	79	5.0	1,823	68	3.7
Tot. Excep.	10,072	694	6.9	10,689	751	7.0
Agri.	470	24	5.2	486	17	3.6
Bus.	2,100	51	2.4	2,316	89	3.8
Dist.	344	15	4.2	339	12	3.4
Health	213	14	6.6	207	8	3.9
Pub. Serv.	66	4	5.8	55	1	1.1
Home Econ.	1,310	18	1.4	1,428	48	3.4
Trades/Ind.	2,737	93	3.4	2,730	108	3.9
Tot. Voc.	7,239	218	3.0	7,562	282	3.7
Total	79,529	3,214	4.1	83,751	3,748	4.5

*Source: For basic and vocational programs, the Course Code Data File; for exceptional programs, the Annual Data Report of the Bureau of Education for Exceptional Students.

Table A9
Newly Certified Teachers*

Programs	1 Number Certified	2 Number as a Percentage of All Fields	3 Number of New Teachers Fall 1985**	4 Number Certified as a Percentage of New Hires	5 Number Certified as a Percentage of All Fields
Elem. Educ.	1,978	35.3	1,417	27.4	139.6
El. Read. Spec.	120	2.1	24	0.5	500.0
English	427	7.6	566	11.0	75.5
Math	274	4.9	399	7.7	68.7
Science	460	8.2	501	9.7	91.9
Soc. Stud.	181	3.2	348	6.7	52.1
For. Lang.	215	3.8	172	3.3	124.8
Health/PE	330	5.9	270	5.2	122.1
Art	124	2.2	123	2.4	100.8
Music	165	2.9	175	3.4	94.3
Tot. Basic	4,275	76.2	3,996	77.4	107.0
Ment. Handi.	240	4.3	149	2.9	160.8
Phy. Imp.	8	0.1	8	0.2	95.2
Speech Ther.	148	2.6	125	2.4	118.7
Hear./Visual	74	1.3	34	0.7	219.5
SLD	267	4.8	170	3.3	157.1
Emot. Handi.	146	2.6	171	3.3	85.5
Gifted	28	0.5	33	0.6	84.7
Var. Excep.	97	1.7	77	1.5	126.2
Tot. Excep.	1,009	18.0	768	14.9	131.4
Agri.	25	0.4	39	0.8	63.3
Bus.	95	1.7	110	2.1	86.5
Health	76	1.4	15	0.3	518.2
Home Econ.	71	1.3	107	2.1	66.2
Trades/Ind.	56	1.0	129	2.5	43.6
Tot. Voc.	323	5.8	400	7.7	80.8
Total	5,608	100.0	5,164	100.0	108.6

*First-time certificates issued during 1984-85. Source: Active Certificate file.
**Taken from Col. 1, Table A2.

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Table A10
Estimated Number of Graduates
From Teacher Education Programs*
Survey Completed Fall 1984

Programs	1 1983-84 Projected**	2 1983-84 Actual	3 1984-85 Projected	4 1985-86 Projected	5 1986-87 Projected
Elem. Educ.	1,172	1,446	1,315	1,422	1,449
El. Read. Spec.	113	129	87	108	112
English	132	120	144	158	166
Math	128	75	106	143	158
Science	108	66	70	104	127
Soc. Stud.	133	140	151	153	165
For. Lang.	29	27	37	36	44
Health/PE	359	326	310	311	322
Art	60	68	65	60	55
Music	102	99	123	127	122
Other	7	0	4	8	12
Tot. Basic	2,341	2,494	2,411	2,628	2,731
Ment. Handi.	167	185	182	169	178
Phy. Imp.	4	0	0	1	1
Speech Ther.	88	107	111	124	117
Hear./Visual	33	28	27	29	29
SLD	162	236	242	251	263
Emot. Handi.	107	91	97	113	123
Gifted	2	15	15	16	16
Home/Hos.	0	3	3	3	3
Var. Excep.	15	33	34	35	36
Tot. Excep.	577	697	710	740	765
Agri.	16	12	14	14	14
Bus.	63	43	45	47	51
Dist.	8	11	13	13	13
Health	8	10	8	10	5
Home Econ.	44	17	14	16	16
Trades/Ind.	46	51	33	49	47
Tot. Voc.	185	144	127	149	146
Total	3,103	3,335	3,248	3,517	3,642

*Based on a survey of deans of 26 Florida colleges and departments of education. Does not include media specialists, guidance counselors, or other nonclassroom teachers.
**Number of graduates for 1983-84 projected on the 1983 survey.

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Table A11
Number of Teacher Education Graduates
As a Percentage of All Fields

Programs	1 1983-84 Projected	2 1983-84 Actual	3 1984-85 Projected	4 1985-86 Projected	5 1986-87 Projected
Elem. Educ.	37.77	43.34	40.49	40.43	39.79
El. Read. Spec.	3.63	3.85	2.68	3.06	3.08
English	4.24	3.58	4.42	4.48	4.56
Math	4.13	2.25	3.25	4.05	4.32
Science	3.46	1.96	2.16	2.94	3.47
Soc. Stud.	4.27	4.18	4.63	4.34	4.53
For. Lang.	0.93	0.81	1.14	1.02	1.21
Health/PE	11.57	9.78	9.54	8.84	8.84
Art	1.93	2.04	2.00	1.71	1.51
Music	3.29	2.97	3.79	3.61	3.35
Other	0.23	0.00	0.12	0.23	0.33
Tot. Basic	75.44	74.77	74.21	74.71	74.99
Ment. Handi.	5.37	5.55	5.61	4.81	4.88
Phy. Imp.	0.13	0.00	0.00	0.03	0.03
Speech Ther.	2.84	3.21	3.42	3.53	3.21
Hear./Visual	1.05	0.82	0.83	0.81	0.78
SLD	5.22	7.07	7.44	7.14	7.23
Emot. Handi.	3.45	2.74	2.98	3.21	3.37
Gifted	0.06	0.45	0.46	0.45	0.44
Home/Hos.	0.00	0.09	0.09	0.09	0.08
Var. Excep.	0.48	0.98	1.04	0.99	0.98
Tot. Excep.	18.59	20.91	21.87	21.05	21.00
Agri.	0.52	0.36	0.43	0.40	0.38
Bus.	2.03	1.29	1.39	1.34	1.40
Dist.	0.26	0.33	0.40	0.37	0.36
Health	0.26	0.30	0.25	0.28	0.14
Home Econ.	1.42	0.51	0.43	0.45	0.44
Trades/Ind.	1.48	1.53	1.02	1.39	1.29
Tot. Voc.	5.96	4.32	3.91	4.24	4.01
Total	100.00	100.00	100.00	100.00	100.00

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Table A12
Projected Number of Teachers Needed
Through 2000-01

Programs	Total Teachers 1984-85	Additional Teachers Needed* 1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1995-96	2000-01
Elem. Educ.	31,638	2,117	2,347	2,670	3,188	3,238	3,617	2,173	1,893
El. Read. Spec.	1,185	49	57	68	87	89	103	44	30
English	7,669	763	628	564	464	470	547	1,187	1,017
Math	5,813	540	446	403	337	342	400	837	709
Science	4,798	656	577	541	483	490	540	955	872
Soc. Stud.	4,724	444	362	324	264	268	315	696	589
For. Lang.	1,689	214	194	186	174	177	195	303	277
Health/PE	5,139	359	307	294	274	278	332	533	429
Art	1,674	142	130	129	128	130	148	196	168
Music	2,300	221	210	214	219	222	248	291	259
Other	2,125	200	179	173	164	166	189	286	248
Tot. Basic	68,755	5,705	5,437	5,566	5,782	5,870	6,634	7,502	6,491
Ment. Handi.	1,613	207	196	196	195	198	216	275	257
Occ./Phy. Ther.	162	28	28	29	30	30	32	35	34
Phy. Imp.	177	14	14	14	14	15	16	19	16
Speech Ther.	1,282	171	177	187	203	206	222	201	196
Hear./Visual	357	42	42	44	46	47	51	52	49
SLD	2,141	259	243	241	238	242	266	348	321
Emot. Handi.	1,256	319	320	328	255	259	277	327	320
Gifted	1,026	157	160	169	103	105	118	126	109
Home/Hos.	262	18	16	15	15	15	18	26	21
Var. Excep.	1,702	121	112	113	115	117	135	166	137
Tot. Excep.	9,978	1,336	1,307	1,336	1,216	1,233	1,352	1,576	1,460
Agri.	484	49	41	37	30	31	36	76	66
Bus.	2,306	141	98	78	46	47	69	249	187
Dist.	338	26	20	17	12	13	16	43	35
Health	206	16	13	11	8	8	10	27	22
Pub. Serv.	55	3	2	2	1	1	1	6	4
Home Econ.	1,423	125	100	88	69	70	84	200	167
Trades/Ind.	2,719	170	120	96	59	60	86	299	226
Tot. Voc.	7,531	531	394	328	226	230	302	900	706
Total	86,264	7,572	7,137	7,230	7,224	7,333	8,288	9,978	8,657

*Additional Teachers Needed is the total number of teachers in the prior years, minus attrition, plus the number needed to keep up with projected number of students (See Appendix Tables A13-A14). Includes vacancies due to interdistrict moves as well as new teachers needed.

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Table A13
Number of Teachers Expected to Terminate
and Projected Need
Through 1988-89*

Programs	1984-85 Total	1985-86 TERM	GRO	NEED	TOT	1986-87 TERM	GRO	NEED	TOT	1987-88 TERM	GRO	NEED	TOT	1988-89 TERM	GRO	NEED	TOT
Elem. Educ.	31,638	1,511	606	2,117	32,244	1,541	806	2,347	33,050	1,561	1,109	2,670	34,159	1,582	1,606	3,188	35,765
El. Read. Spec.	1,185	26	23	49	1,207	27	30	57	1,238	27	42	68	1,279	27	60	87	1,339
English	7,669	630	134	763	7,803	642	-14	628	7,789	650	-86	564	7,703	659	-195	464	7,507
Math	5,813	438	102	540	5,915	447	-1	446	5,914	453	-49	403	5,865	459	-122	337	5,743
Science	4,798	572	84	656	4,881	583	-6	577	4,875	591	-50	541	4,825	599	-116	483	4,709
Soc. Stud.	4,724	361	83	444	4,807	369	-6	362	4,801	373	-49	324	4,751	378	-114	264	4,637
For. Lang.	1,689	184	30	214	1,719	188	6	194	1,725	191	-4	186	1,721	193	-19	174	1,702
Health/PE	5,139	266	92	359	5,231	272	36	307	5,267	275	19	294	5,286	279	-5	274	5,281
Art	1,674	112	30	142	1,705	114	16	130	1,721	115	14	129	1,735	117	11	128	1,746
Music	2,300	178	42	221	2,343	182	28	210	2,371	184	29	214	2,400	187	32	219	2,432
Other	2,125	162	38	200	2,163	165	13	179	2,177	168	5	173	2,182	170	-6	164	2,176
Tot. Basic	68,755	4,441	1,264	5,705	70,019	4,529	908	5,437	70,927	4,588	978	5,566	71,905	4,649	1,133	5,782	73,038
Ment. Handi.	1,613	178	29	207	1,642	181	15	196	1,657	184	12	196	1,669	186	9	195	1,679
Occ./Phy. Ther.	162	25	3	28	165	25	3	28	167	26	3	29	170	26	4	30	174
Phy. Imp.	177	11	3	14	181	11	2	14	183	12	2	14	185	12	3	14	188
Speech Ther.	1,282	147	24	171	1,306	149	27	177	1,333	151	35	187	1,369	153	50	203	1,419
Hear./Visual	357	36	7	42	364	36	6	42	370	37	7	44	377	37	9	46	386
SLD	2,141	220	39	259	2,180	224	19	243	2,199	227	14	241	2,213	230	8	238	2,221
Emot. Handi.	1,256	228	91	319	1,346	233	87	320	1,434	236	92	328	1,526	239	16	255	1,542
Gifted	1,026	75	82	157	1,108	77	83	160	1,191	78	91	169	1,282	79	24	103	1,307
Home/Hos.	262	13	5	18	266	14	2	16	269	14	2	15	270	14	1	15	271
Var. Excep.	1,702	90	31	121	1,733	92	20	112	1,753	93	20	113	1,773	94	21	115	1,794
Tot. Excep.	9,978	1,023	313	1,336	10,291	1,043	264	1,307	10,555	1,057	279	1,336	10,835	1,070	145	1,216	10,980
Agri.	484	41	8	49	492	42	-1	41	491	42	-5	37	486	43	-12	30	474
Bus.	2,306	100	40	141	2,347	102	-4	98	2,342	104	-26	78	2,316	105	-59	46	2,258
Dist.	338	20	6	26	344	20	-1	20	343	21	-4	17	339	21	-9	12	331
Health	206	13	4	16	210	13	0	13	209	13	-2	11	207	13	-5	8	202
Pub. Serv.	55	2	1	3	56	2	0	2	56	2	-1	2	55	2	-1	1	54
Home Econ.	1,423	100	25	125	1,447	102	-3	100	1,445	104	-16	88	1,429	105	-36	69	1,393
Trades/Ind.	2,719	123	47	170	2,767	125	-5	120	2,762	127	-31	96	2,731	128	-69	59	2,662
Tot. Voc.	7,531	399	131	531	7,662	407	-14	394	7,649	413	-85	328	7,564	418	-192	226	7,372
Total	86,264	5,863	1,709	7,572	87,973	5,979	1,158	7,137	89,131	6,058	1,172	7,230	90,304	6,137	1,087	7,224	91,390

TERM=Estimated Number of Teachers Needed Due to Termination
GRO=Teachers Needed Due to Enrollment Growth
(negative number means fewer teachers needed)
NEED=Number of Replacement Teachers Needed (Term + Gro)
TOT=Projected Number of Teachers Needed (Total for prior year + Need)

*Projections based on projected enrollments with grades K-6 and grades 7-12 projected separately. Exceptional Projections reflect expected program growth through 1986-87.

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Table A14
Number of Teachers Expected to Terminate
and Projected Need
From 1989-90 to 2000-01*

Programs	1989-90 TERM	GRO	NEED	TOT	1990-91 TERM	GRO	NEED	TOT	1995-96** TERM	GRO	NEED	TOT	2000-01** TERM	GRO	NEED	TOT
Elem. Educ.	1,601	1,637	3,238	37,402	1,621	1,996	3,617	39,398	1,838	335	2,173	43,249	2,019	-126	1,893	43,081
El. Read. Spec.	28	61	89	1,401	28	75	103	1,475	32	13	44	1,619	35	-5	30	1,613
English	667	-197	470	7,311	675	-128	547	7,182	766	421	1,187	8,598	841	176	1,017	10,099
Math	464	-122	342	5,621	470	-69	400	5,552	533	304	837	6,603	585	124	709	7,671
Science	606	-116	490	4,593	613	-73	540	4,520	696	260	955	5,400	764	108	872	6,321
Soc. Stud.	383	-115	268	4,523	388	-72	315	4,450	440	256	696	5,317	483	106	589	6,225
For. Lang.	195	-18	177	1,683	198	-3	195	1,681	224	79	303	1,972	246	30	277	2,239
Health/PE	282	-4	278	5,277	286	46	332	5,323	324	209	533	6,168	356	73	429	6,841
Art	118	12	130	1,758	120	28	148	1,786	136	61	196	2,051	149	19	168	2,236
Music	189	33	222	2,465	191	56	248	2,521	217	74	291	2,871	238	21	259	3,083
Other	172	-6	166	2,170	174	15	189	2,185	197	89	286	2,538	217	32	248	2,827
Tot. Basic	4,705	1,166	5,870	74,204	4,762	1,871	6,634	76,075	5,403	2,099	7,502	86,385	5,933	559	6,491	92,236
Ment. Handi.	188	10	198	1,689	191	26	216	1,715	216	59	275	1,971	237	19	257	2,153
Occ./Phy. Ther.	26	4	30	178	27	6	32	184	30	4	35	207	33	1	34	218
Phy. Imp.	12	3	15	191	12	5	16	195	14	6	19	222	15	2	16	238
Speech Ther.	155	51	206	1,469	157	65	222	1,534	178	23	201	1,703	196	0	196	1,737
Hear./Visual	38	9	47	395	38	13	51	408	43	9	52	459	48	2	49	481
SLD	233	9	242	2,230	236	30	266	2,260	267	81	348	2,603	294	27	321	2,857
Emot. Handi.	242	17	259	1,559	245	32	277	1,591	278	49	327	1,817	305	15	320	1,963
Gifted	80	25	105	1,332	81	38	118	1,370	91	35	126	1,549	100	8	109	1,642
Home/Hos.	14	1	15	272	14	3	18	275	16	10	26	317	18	3	21	349
Var. Excep.	95	22	117	1,815	97	39	135	1,854	109	56	166	2,115	120	16	137	2,279
Tot. Excep.	1,083	150	1,233	11,130	1,097	255	1,352	11,385	1,244	332	1,576	12,964	1,366	94	1,460	13,916
Agri.	43	-12	31	461	44	-8	36	453	50	27	76	542	55	11	66	637
Bus.	106	-59	47	2,199	108	-39	69	2,160	122	127	249	2,586	134	53	187	3,037
Dist.	21	-9	13	322	22	-6	16	317	24	19	43	379	27	8	35	445
Health	13	-5	8	196	14	-3	10	193	15	11	27	231	17	5	22	271
Pub. Serv.	2	-1	1	52	2	-1	1	51	3	3	6	62	3	1	4	72
Home Econ.	106	-36	70	1,356	108	-24	84	1,332	122	78	200	1,595	134	33	167	1,873
Trades/Ind.	130	-70	60	2,592	132	-45	86	2,547	149	149	299	3,048	164	62	226	3,581
Tot. Voc.	423	-193	230	7,179	428	-126	302	7,053	486	414	900	8,443	534	173	706	9,917
Total	6,211	1,122	7,333	92,512	6,287	2,001	8,288	94,513	7,132	2,845	9,978	107,791	7,832	825	8,657	116,069

TERM=Estimated Number of Teachers Needed Due to Termination
GRO=Teachers Needed Due to Enrollment Growth
(negative number means fewer teachers needed)
NEED=Number of Replacement Teachers Needed (Term + Gro)
TOT=Projected Number of Teachers Needed (Total for prior year + Need)

*Projections based on projected enrollments with grades K-6 and grades 7-12 projected separately.
**Termination and growth shown are from prior year. Intervening years between 1991 to 1995 and 1996 to 2000 are not shown.

SP/MIS 8/30/85

Table A15
Projected Teacher Supply and Demand
1985-86

Subject Fields	1 Number Needed Due to Enrollment Growth	2 Number Needed to Replace Resigning Teachers	3 Number Needed for Program Growth	4 Number Needed Excluding Current Out of Field	5 Number Needed to Replace Teachers Now Teaching Out of Field	6 Total	7 Proj. Florida Education Graduates 1984-85	8 Estimated Percentage New Teachers Out of State*
Elem. Educ.	806	1,541	0	2,347	286	2,633	1,422	62.1
El. Read. Spec.	30	27	0	57	16	72	108	93.3
English	-14	642	121	749	569	1,318	158	71.1
Math	-1	447	80	526	405	931	143	68.9
Science	-6	583	97	674	466	1,140	104	64.8
Soc. Stud.	-6	369	347	709	377	1,086	153	69.6
For. Lang.	6	188	0	194	114	308	36	82.0
Health/PE	36	272	0	307	287	594	311	64.4
Art	16	114	0	130	57	187	60	67.8
Music	28	182	0	210	34	244	127	63.9
Other	13	165	0	179	105	284	0	**
Tot. Basic	908	4,529	645	6,082	2,715	8,797	2,620	65.2
Ment. Handi.	15	181	23	219	74	293	169	55.3
Occ./Phy. Ther.	3	25	22	50	0	50	0	**
Phy. Imp.	2	11	5	19	8	27	1	**
Speech Ther.	27	149	35	211	14	225	124	73.3
Hear./Visual	6	36	4	46	2	48	29	51.7
SLD	19	224	29	272	106	378	251	16.9
Emot. Handi.	87	233	72	392	210	601	113	23.5
Gifted	83	77	44	203	267	471	16	**
Home/Hos.	2	14	10	25	2	27	0	**
Var. Excep.	20	92	14	125	68	193	35	97.6
Tot. Excep.	264	1,043	255	1,562	751	2,312	737	53.2
Agri.	-1	42	0	41	17	58	14	71.4
Bus.	-4	102	0	98	89	187	47	63.9
Dist.	-1	20	0	20	12	31	13	**
Health	0	13	0	13	8	21	10	41.4
Pub. Serv.	0	2	0	2	1	3	0	**
Home Econ.	-3	102	0	100	48	148	16	75.0
Trades/Ind.	-5	125	0	120	107	228	49	90.4
Tot. Voc.	-14	407	0	394	282	676	149	70.1
Total	1,158	5,979	900	8,037	3,748	11,785	3,506	63.9

*Taken from Appendix Table A9, Teacher Supply and Demand in Florida: Third Annual Report.
**No information available on which to make an estimate.

SP/MIS 10/18/85

State of Florida
Department of Education
Tallahassee, Florida
Ralph D. Turlington, Commissioner
An equal opportunity employer/affirmative
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FLORIDA: A STATE OF EDUCATIONAL DISTINCTION. "On a statewide average, educational achievement in the State of Florida will equal that of the upper quartile of states within five years, as indicated by commonly accepted criteria of attainment."